# PROPOSAL TO ADOPT THE CONCEPT THAT TYPES ARE TYPES OF NAMES, IN THE THIRD EDITION OF THE INTERNATIONAL CODE OF ZOOLOGICAL NOMENCLATURE. Z.N.(S.) 2273

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The conceptual basis for typification which the first and second editions of the International Code of Zoological Nomenclature follow is that a nominal taxon bears a name and is based upon a type. A nominal taxon is a taxonomic concept visualised by its proposer, represented by its type, and identified by its name. Thus, in the sense of the Code, it follows that a type is not the type of a name but of a nominal taxon.

2. Although the Code adopts the above concept as the basis for its language (for example, Article 63 of the draft third edition has: "The type of a nominal taxon of the family group is that nominal genus upon which the name of the family group taxon is based"), in application it requires, rather, that taxonomists treat

types as though they were types of names.

3. In the course of our work on the Editorial Committee of the new edition of the Code, we have reached the conclusion that there is no justification for the continued use, in the Code, of the expression "nominal taxon". The concept is unnecessary to zoological nomenclature and its embodiment in the Code is a hindrance to comprehension by confusing its language. We propose that throughout the Code types should be treated as the types of names; the International Code of Botanical Nomenclature already does this. Article 7 (1972) states: "The application of names of taxa of the rank of family or below is determined by means of nomenclatural types (types of names of taxa). A nomenclatural type (typus) is that element to which the name of the taxon is permanently attached, whether as a correct name or as a synonym. Note 1. The nomenclatural type is not necessarily the most typical of representative element of a taxon; it is that element with which the name is permantly associated."

## **ARGUMENT**

4. The argument that types in nomenclature are the types of names was expressed by G.G. Simpson in 1940 and 1961 in a

manner that we cannot better. With his permission, and his agreement with this proposal, we quote from Simpson, 1961: 30–31: "The zoological contents of taxa frequently and inevitably change with increases in knowledge and differences of judgment and opinions. That of course constantly raises problems as to whether a current taxon is really the same as one to which a name was originally applied. This problem is met, imperfectly, but usually adequately, by the designation of types. The type for the name of a species is an individual specimen, and the rule is that regardless of any other contents of the taxon a name belongs to the species in which its type specimen is placed. It frequently happens that types of two or more names are placed in one species, and this is when priority and the lists of nomina conservanda are called on to determine which name should actually be used. The type of the name of a genus is the name of a species and is thus indirectly tied to a type specimen. It is generally considered that the type of the name of a family is the name of a genus. . .

"... A nomenclatural type is simply something to which a name is attached by purely legalistic convention. It should have nothing to do with the nonnomenclatural processes of defining the species and should have no special role in identifying other specimens. Modern taxonomists are becoming increasingly careful in making this distinction, but the old confusion still permeates much of zoological thought and procedure. It is, indeed, perpetuated by the Rules, which continue to speak of the types of species, genera, and so on, when they should refer only to the types of names. It is nominalistic absurdity to confuse a set of objects

with the name or symbol for that set.'

5. We do not discuss, here, issues of taxonomic theory such as those raised by the incompatibility of the expressed relationship between the type and the taxon inherent in Article 61 of the first and second editions of the Code, and that of the relationship between onomatophore and hypodigm, as expressed by Simpson in 1940. Such issues are irrelevant to the use of types in nomenclature.

# CONCLUSION

6. We have concluded that for the purposes of the Code – as a Code of nomenclature and not of theoretical taxonomy – the concept of the nominal taxon is unnecessary. As it is expressed in the Code it is not merely a substitute for "name" but is the taxonomic concept of the species derived from the original hypodigm (Simpson, 1940: 418–419). For the purposes of nomenclature the unique type (holotype, lectotype, neotype; if none of these, the syntypes) alone of that hypodigm retains

significance and forms the basis of our system of typification of names. The taxonomic concept estimated from it is historically interesting but irrelevant to nomenclature.

## **PROPOSAL**

7. Accordingly, we propose that wherever the expression "nominal taxon" occurs in the Code it should, as appropriate, be deleted, or replaced by "name", or replaced otherwise and that wherever types are mentioned in the Articles (principally in Articles 61 to 75), and any cross-reference to them, the usage adopted will express the principle that "the type of a specific or subspecific name is a specimen, that of a genus or subgenus is the name of a species, and that of a family-group name is the name of a genus".

# References

SIMPSON, G.G. 1940. Types in modern taxonomy. *Amer. J. Sci.*, vol. 238: 413-431

—— 1961. Principles of animal taxonomy. New York (Columbia University Press)

"Type of Name" versus "Type of a Nominal Taxon"

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The question whether a type is the "type of" a nominal taxon or the "type of" a name, and the question of whether the expression "nominal taxon" should continue to be used (see submission of Ride and Sabrosky, and of Colless), are interlocking problems; and both implicate the definitions of "type" and "nominal taxon" to be accepted under the Code, and hence involve

the Glossary.

I will first examine the relationships between a "taxonomic" species and a "nominal" species as that term is actually used in the body of the Code. A ("taxonomic", or "zoological") species is an objective population of animals conforming to certain variously specified criteria (the most frequently cited being free interbreeding internally and reproductive isolation externally). It may be recognised as such or not; if recognised, its content and scope may be a matter of dispute. It may be described or not and named or not; if named, it may have one, or more than one, available name, but can have only one valid name under the Code. Its definition in